User's Guide

FourPointSurround FPS2000 Digital

Contents

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS - All safety and operating instructions should be read before the *FourPointSurround FPS2000 Digital* amplified subwoofer/satellite system is operated.

RETAIN INSTRUCTIONS - The safety and operating instructions should be retained for future reference.

HEED WARNINGS - All warnings on the subwoofer and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS - All operating and use instructions should be followed.

CLEANING - Unplug the subwoofer from the wall outlet or other power source before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

ATTACHMENTS - Do not use attachments not recommended by Cambridge SoundWorks as they may cause hazards.

WATER AND MOISTURE - Do not use the subwoofer near water—for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

ACCESSORIES - Do not place the *FourPointSurround FPS2000 Digital* system on an unstable cart, stand, tripod, bracket, or table. The subwoofer or satellites may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by Cambridge Sound-Works, or sold with the product. Any mounting of the satellites or sub-woofer should follow the manufacturer's instructions, and should use a mounting accessory recommended by Cambridge SoundWorks.

VENTILATION - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the subwoofer and to prevent it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. The subwoofer should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or Cambridge SoundWorks' instructions have been adhered to.

HEAT - The subwoofer should be situated away from heat sources such as radiators, heat registers, stoves, and other products (including amplifiers) that produce heat.

POWER SOURCES - The subwoofer should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

POLARIZATION - The subwoofer may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

POWER-CORD PROTECTION - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the subwoofer.

LIGHTNING - For added protection for the *FourPointSurround FPS2000 Digital* system during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the subwoofer due to lightning and power-line surges.

OVERLOADING - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY - Never push objects of any kind into the subwoofer through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the subwoofer.

SERVICING - Do not attempt to service the subwoofer yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE - Unplug the subwoofer from the wall outlet or other power source and refer servicing to qualified service personnel under the following conditions:
a) When the power-supply cord or plug is damaged.
b) If liquid has been spilled, or objects have fallen into the subwoofer.
c) If the subwoofer has been exposed to rain or water.
d) If the subwoofer does not operate normally by following the operating instructions; or exhibits a distinct change in performance.
e) If the product has been dropped or damaged in any way.

REPLACEMENT PARTS - When replacement parts are required, be sure the service technician has used replacement parts specified by Cambridge SoundWorks or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

SAFETY CHECK - Upon completion of any service or repairs to the *FourPointSurround FPS2000 Digital* system, ask the service technician to perform safety checks to determine that the *Four Point Surround* system is in proper operating condition.

WALL OR CEILING MOUNTING - The *FourPointSurround FPS2000 Digital* satellites should be mounted to a wall or ceiling only as recommended by Cambridge SoundWorks.

Safety & Regulatory Information

**The following sections contain notices for various countries:**

CAUTION: This device is intended to be installed by the user in a CSA/TUV/UL certified/listed IBM AT or compatible personal computers in the manufacturer's defined operator access area. Check the equipment operating/installation manual and/or with the equipment manufacturer to verify/confirm if your equipment is suitable for user-installed application cards.

Modifications

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

Compliance

This product conforms to the following Council Directive:

Directive 89/336/EEC, 92/31/EEC (EMC), 73/23/EEC (LVD)
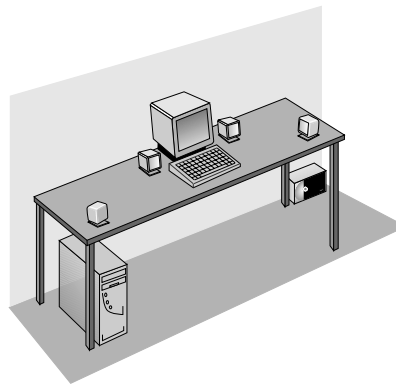
Introduction

Thank you for purchasing FourPointSurround™ FPS2000 Digital.

The FPS2000 Digital is the first multimedia speaker system to support DirectSound®3D and Environmental Audio in true multichannel, digitally transfered sound. It lets you experience the full potential of the multichannel sound encoded in today's latest computer software. We think you will find it adds an exciting new dimension to computer sound and gaming.

Speaker Placement

The front left and front right satellites should be placed to the sides of the monitor. When placing satellites on the desktop, install the desktop stands. If you wish to save desktop space, use the hook and loop fasteners to attach the satellites to the sides of the computer monitor (see page 15).

If your are lucky enough to have side walls close to your listening position, excellent placement for the left rear and right rear satellites is alongside or behind your listening position, slightly above ear level (use the hook and loop fasteners, see diagram A). Do 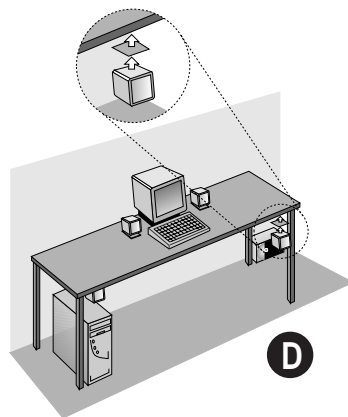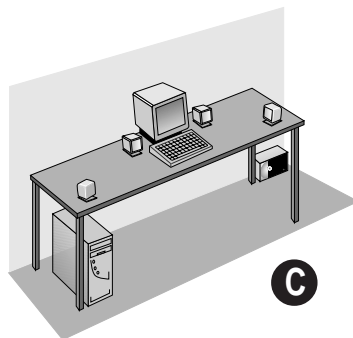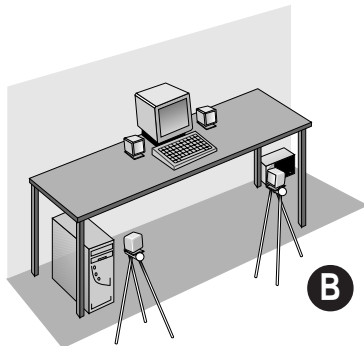not be concerned if this is not practical, since any rear satellite placement to the left and right side of the listening position will provide strong directional and surround effects.

The rear satellites may be installed on their convenient floor stands (see diagram B). When listening, the stands should be positioned to the immediate left and right of your listening position. The stands are small enough to be stowed underneath or alongside a desk when not in use.

The rear satellites may also be placed in any convenient sites alongside the listener, including sites slightly forward of the listening location. The rear satellites do not have to be at exactly the same height, nor at the same height as the front satellites. Try the extreme corners of a desk using the desktop stands (C) or attach the rear satellites under a desktop or at the sides of a desk using the hook and loop fasteners (D).

The subwoofer does not contribute to directional sound effects. Its optimum position is on the floor against the wall. The closer the subwoofer is to the corner, the stronger the maximum bass output. Alternately, it can be placed on a shelf or other sites, but its maximum output will be reduced.

A

B

C

D
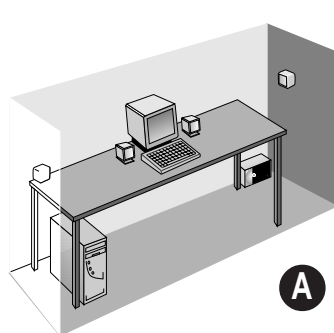
Speaker Wiring Diagram

Subwoofer

Front Left Satellite

Front Right Satellite

CAMBRIDGE SOUNDWORKS

FOUR POINT SURROUND

CAMBRIDGE SOUNDWORKS

FRONT LEFT

FRONT RIGHT

Out To Computer Sound Card

Rear Left Satellite

POWER

SPEAKERS
LEFT   RIGHT

AUDIO INPUT
FRONT

DIGITAL DIN

BASS LEVEL

Audio Connection Cables

REAR RETURN

19V DC IN

VOLUME CONTROL

REAR

FRONT LEFT

Rear Right Satellite

REAR LEFT

REAR RIGHT

Your plug adapter may vary
depending on your country

REAR LEFT

CAMBRIDGE SOUNDWORKS

CAMBRIDGE SOUNDWORKS

CAMBRIDGE SOUNDWORKS

Power Supply Adapter

Volume Control

Satellite Connections

Typically, the 3 meter speaker cables will connect the front satellites to the subwoofer and the 5 meter cables will connect the rear satellites to the subwoofer.

A panel of eight self-adhesive labels is provided to identify each satellite and the opposite end of the cable connected to a satellite.

1. Identify the two 3 meter cables. Most satellites will be used with their desktop stands. In this case, thread one end of a 3 meter cable through the hole in the desktop stand. Connect this end to one satellite, (as shown in diagram E). If used, carefully insert the desktop stand's attachment arm into the socket in the back of the satellite, taking up any slack in the cable as required.

2. Remove the backing from the small, round "FRONT LEFT" label and apply it to the back of the satellite (see diagram E).

3. Remove the backing from the remaining, longer "FRONT LEFT" label and wrap it around the opposite end of the speaker cable you just connected.

4. Connect this end of the speaker cable to the red and black "FRONT LEFT" speaker connectors on the subwoofer.

5. Repeat this process for the Front Right, Rear Right and Rear Left satellites. Be sure to use the remaining 3 meter cable for the other front speaker.

To connect the speaker wires to the spring loaded connectors on the satellite and subwoofer, push back on a spring-loaded tab to expose the connection hole. Insert the bare end of the wire into the exposed hole, then release the tab to lock the wire in place. Connect wires with red bands to red tab connectors and unmarked wires to black tab connectors.
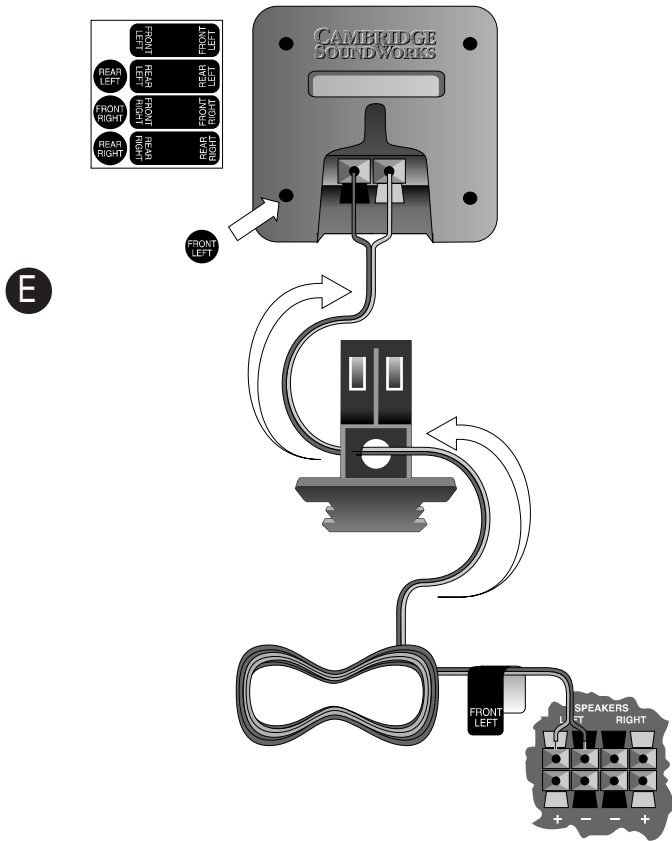
Attaching The Floor Stands

The rear satellites (with their desktop stands attached) may be installed in their floor stands.

1. One leg of each floor stand has a full length slot, with short notches opposite the slot at each end. Insert a satellite cable inside one of these legs by feeding it down the length of the full length slot. At each end, feed the cable through the short notches (see diagram G).

2. Insert the satellite end of the leg/cable assembly into the middle socket of the apex joint. Make sure the satellite cable exits through the short notch and not the full length slot (see diagram F).
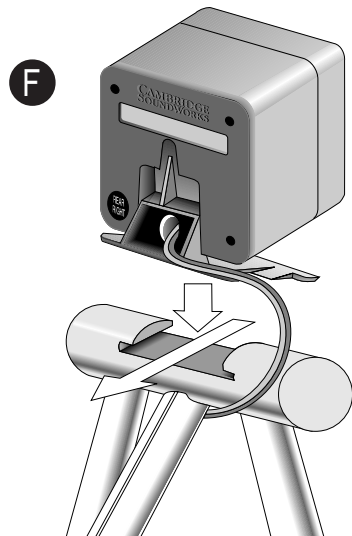
3. Insert the two solid legs into the outside sockets in the apex joint.

4. Position the two "cut-away" sections of the desktop stand over the opening in the top of the apex joint, as shown in diagram F. Be sure to align the face of the stand with the face of the apex joint. Lower the stand straight down into the apex joint.

5. Holding the ends of the apex joint, push on the front of the desktop stand until it slips back into the slot in the apex joint. Confirm a secure fit.

6. At the base of the rear leg, gently pull on the satellite cable to remove any unnecessary slack in the cable.

7. Insert a rubber plug into the base of each leg, taking care to feed the cable out the short notch in the rear leg (see diagram H).
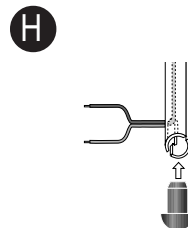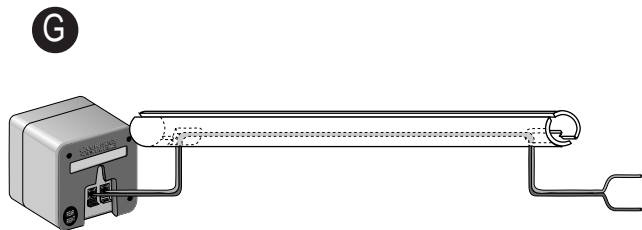
Power Supply Adapter

Confirm that the power switch is in the "OFF" position. Insert the power supply's AC plug into the appropriate receptacle. Insert the small DC connector into the "15V DC IN" receptacle on the back of the subwoofer.

I

Your plug adapter may vary depending on your country
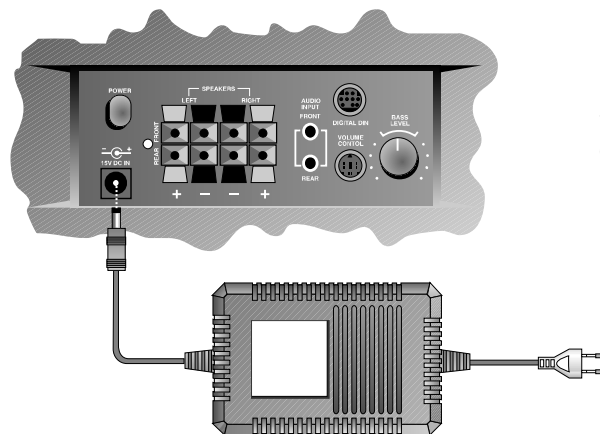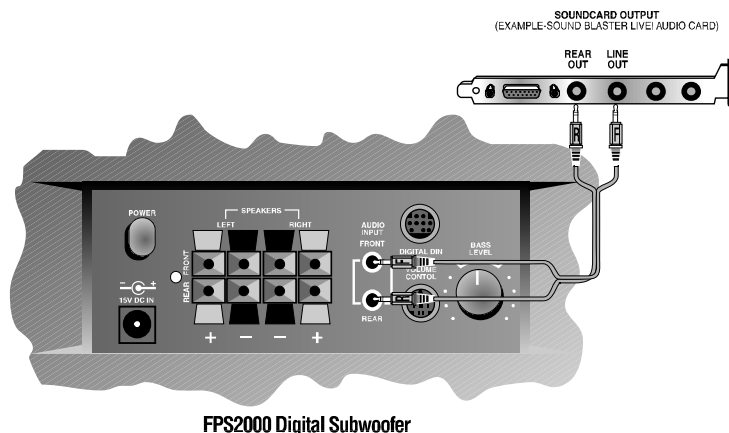
Audio Signal Connections

The FPS2000 Digital comes with a front/rear audio signal cable. Connect this cable between your sound card and the subwoofer (see diagram **J**).

1. Insert one of the green miniplugs into the green minijack (LINE OUT) on your sound card.

2. Insert the corresponding black miniplug into the black minijack (REAR OUT) on your sound card.

3. Insert the green miniplug at the other end of the cable into the minijack (FRONT) on the subwoofer.

4. Insert the black miniplug into the minijack (REAR) on the subwoofer.

Note: If you have a stereo sound card (one without a rear stereo minijack line output), connect a green miniplug cable to the LINE OUT minijack of your sound card and the opposite green miniplug to the FRONT minijack on the subwoofer. This will cause both left front and left rear satellites to play the left stereo channel and both right satellites to play the right stereo channel.

J

SOUNDCARD OUTPUT
(EXAMPLE-SOUND BLASTER LIVE! AUDIO CARD)

REAR OUT   LINE OUT

FPS2000 Digital Subwoofer

Connection To Sound Blaster Live! Via DIGITAL DIN

If your Sound Blaster Live! sound card includes a Digital I/O card, you can take advantage of the clear, distortion-free audio available from its Digital DIN output.

1. Insert one end of the SPDIF cable into the DIGITAL DIN output jack on the Sound Blaster Live! Digital I/O card. The position of the Digital DIN connector on the Digital I/O card may be different from this diagram. The Digital DIN connector is the only connector with a 9-pin configuration.

2. To configure the Sound Blaster Live! sound card for four speakers refer to the on-line SBLive! documentation

Note: The FPS2000 Digital will detect the presence of a plug connected to the DIGITAL DIN input and give the DIGITAL DIN input priority. Any signal present at the AUDIO input will be ignored. Be sure to remove the plug from the DIGITAL DIN input if you wish to listen to a sound source through the analog AUDIO INPUT.


Digital DIN Connector
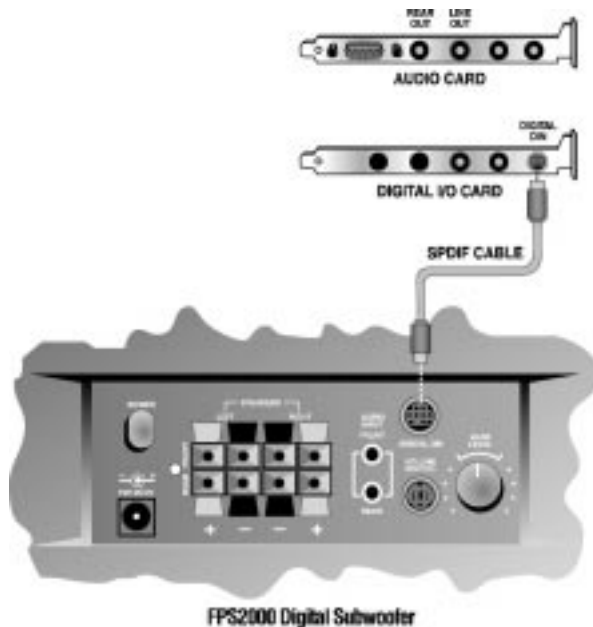
Using The Volume Control

The Volume Control has a Front/Rear Balance Control, a Master Level Control (see diagram M), and an On/Off power switch.

Use the Master Level Control whenever you wish to adjust the speaker output level.

Adjust the Front/Rear Balance Control to achieve satisfactory output from all four speakers. It should not be necessary to adjust the control more than once while playing any single game. Different games may benefit from different Front/Rear Balance Control settings.

Front/Rear Balance Control

M

Master Level Control
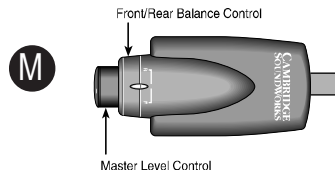
Adjusting Output Level

In most instances, the FPS2000 Digital Master Level Control will be the most convenient way to adjust the overall playback level. It responds instantly and doesn't require you to pause games or programs. But there are other output level controls present in software to consider. Versions of Microsoft® Windows® and most other operating systems offer an on-screen sound level Control, while most game programs provide yet another one. For the FPS2000 Digital Master Level Control to perform at its best, these software level controls should be set to an 'optimum' position and then left alone.

Set any software volume controls to approximately 75% of their maximum output level. This should allow the FPS2000 Digital Master Level Control to achieve the highest output level desired when set to its loudest setting.

If the FPS2000 Digital's maximum output is still not sufficient at the extreme setting of its Volume Control, try increasing one, and only one, of the software volume controls to increase overall output. If you find the optimum output level of the FPS2000 Digital system occurs at too low a setting of its Volume Control, reduce the setting of one software volume control (preferably the operating system's output level control) to achieve greater control range.

Note: Some software volume controls may introduce distortion when set to their maximum level. Experiment to achieve the cleanest sound.

Bass Level Control

The output of the subwoofer can be adjusted to suit the listener's taste. Start with the control in the 12 o'clock position (see diagram N). After using the system for a couple of hours, adjust the control up or down to fine-tune it.
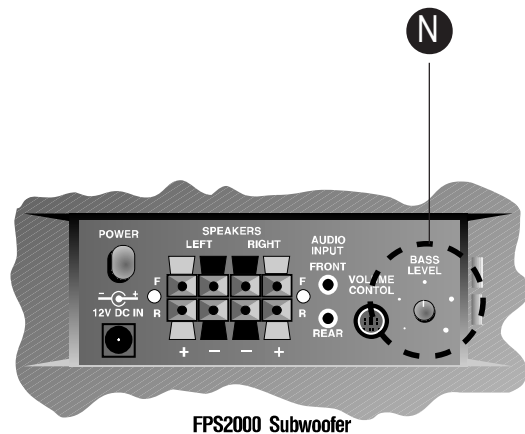
⚠ Important

Playback Levels

FourPointSurround FPS2000 Digital is intended for individual or small group listening and will achieve surprisingly high output levels. However, playing the system continuously at overly loud, distorted levels on heavy bass program material may cause its internal fuse to blow.

The fuse can be replaced *only* by a qualified representative. To avoid this inconvenience and a possible non-warranty repair charge, reduce the playback volume when the system shows obvious signs of stress, i.e. it sounds "raspy," "fuzzy," and/or "muddy."

FPS2000 Subwoofer

Mounting The Satellites

To a flat surface:

To mount the satellites the side of a monitor or other flat surface, use the self-adhesive "hook and loop" fastener squares.

To the wall:

To wall-mount the cubes on structurally strong surfaces (a wall stud or wood panelling), screw the No. 10 screws into the material. Allow their heads to protrude about 1/4 inch to fit into the keyhole slots on the back of each cube (as shown below).

The plastic anchors supplied will be needed to secure the screws in most wall surfaces. If so, drill 1/4 inch holes in the wall, then tap the anchors into the holes until they are flush with the wall. Then screw the screws into the anchors until they protrude about 1/4 inch.

Be sure to apply the stick-on rubber feet to the back of the satellite cubes. This assures an acoustically secure installation.

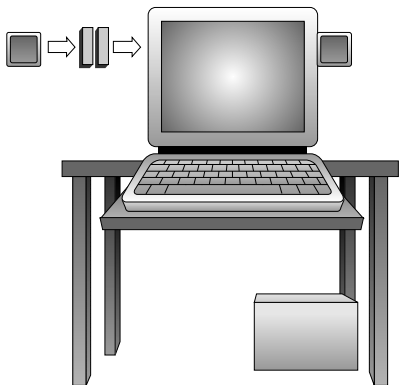# Specifications

FPS2000 Digital's
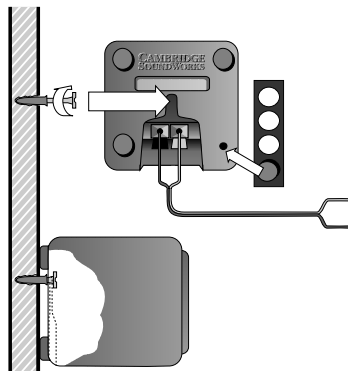Four-channel
Amplifier Specifications

Subwoofer: 25 watts RMS.

Satellite: 7 watts RMS per channel.

These specifications apply to a FPS2000 Digital operating from a 15V DC power adapter.

Hook and loop fastener mounting

Keyhole slot mounting

If You Have a Problem

Please retain all contents including packaging and proof of purchase until you are fully satisfied with product.

  If you find that you have a problem with your Creative product and believe that it needs to be repaired or replaced, you should verify the purchase date and take the appropriate action as detailed below:

Less than 30 days since date of purchase

Should your store receipt indicate that the product is less than 30 days old, you have the option of calling Technical Support for assistance or returning the full product to the dealer/retailer for a replacement or credit (see Creative Technical Services section for contact numbers).

More than 30 days since date of purchase

First contact European Technical Support (see Creative Technical Services section for contact numbers) to establish the nature of the problem and details on our repair procedure. Creative Labs requires that all returns for repair/replacement must first be issued with an authorisation number.

Returning a product for repair

- Contact Technical Support to receive your authorisation number for repair/replacement of product.
- Technical Support will communicate how to return the product in question for repair/replacement.
- You should only return the hardware item in question and return it to the address detailed by technical support. Please retain all software, accessories and the original packaging.
- Please quote the authorisation number clearly on the outside of the packaging, in which you return the hardware item in question.
- Upon receipt of the faulty item, Creative Labs will process your request and arrange return.

Note: Creative may replace or repair the product with new or reconditioned parts and the faulty parts will become the property of Creative. The warranty period for your repaired/replacement items is 90 days from the date of shipment from Creative, or what is left on the original item's warranty, which ever is longer.

  To avoid tariffs when shipping a product to Creative Labs from outside the E.U., you must complete the relevant customs documentation before shipping the product (please allow 30 Days).

Limited Warranty

Creative Labs (Ireland) Limited ("Creative") warrants to you, the original purchaser only, that the hardware product will be free of defects in materials and workmanship for a period of two years after the date of purchase, or such other period as may be required by applicable law ("Warranty Period"). Creative's entire liability and your remedy will be, at Creative's sole discretion, the repair or replacement (with the same or similar model of any hardware or accompanying item(s) not meeting the "Limited Warranty" explained above that is returned to Creative's authorised distributor or dealer during the Warranty Period with a copy of your receipt.

What this warranty does not cover

To the maximum extent permitted by applicable law, Creative disclaims all other warranties and conditions, expressed or implied, including the conditions of quality, merchantability or fitness for a particular purpose with respect to the use of this product. Creative also disclaims any obligation to support products for all operating environments - for example, by ensuring interoperability with future versions of software or hardware. In no event shall Creative or its licensors be liable for any indirect, incidental, special or consequential loss or for any lost profits, savings or data arising from or relating to the use of this product, even if Creative or its licensors have been advised of the possibility of such loss.

   Specifically, this warranty does not cover failures of the product which result from accident, abuse, misuse, alterations (by persons other than Creative or its authorised repair agents), moisture, corrosive environments, shipping, high voltage surges, or abnormal working conditions. This warranty does not cover normal wear and tear. You are specifically advised to take a backup copy of any software provided with the Creative product for security purposes.
Note: This warranty gives you specific legal rights. You may have other rights which vary from country to country. Certain limitations in this warranty are not permitted by the jurisdiction of some countries, so some limitations here may not apply to you.